Title: Immunotherapy In HIV Infected Persons Using Vaccines After Multi-Drug Treatment

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of stimulating a HIV1-specific CD8⁺ response in a human infected with an HIV retrovirus said method comprising:

administering to the human, a recombinant virus, which enters the cells of the human and intracellularly produces HIV specific peptides for presentation on the cell's MHC class I molecules,

where said peptides are presented in an amount sufficient to stimulate a protective CD8⁺ HIV structural antigen response, and

where said human

- i. has a viral load of less than 10,000 viral copies per ml of plasma and a CD4⁺ cell count of above 500 cells/ml, and
- ii. has been treated with one or more anti-viral agents, which contributed to a lower viral copy and higher CD4⁺ cell count than before treatment where said HIV specific peptides comprise HIV Gag, Gp120, Nef or Pol peptides.
- 2. (Previously Presented) A method of claim 1 wherein the human has been treated with anti-viral agents, which resulted in the human having a viral load of less than 1,000 viral copies per ml of blood serum and a CD4⁺ cell count of above 500 cells/ml.
- 3. (Original) A method of claim 2 wherein the anti-viral agents comprise a combination of protease inhibitors and inhibitors of reverse transcriptase.
- 4. (Canceled).
- 5. (Previously Presented) A method of claim 1 wherein the recombinant virus is an attenuated recombinant virus.

Filing Date: January 25, 2002

Title: Immunotherapy In HIV Infected Persons Using Vaccines After Multi-Drug Treatment

Dkt: 1662.018US1

- (Previously Presented) A method of claim 5 wherein the attenuated recombinant virus 6. comprises a pox virus.
- (Previously Presented) A method of claim 6 wherein the attenuated recombinant pox 7. virus comprises NYVAC or ALVAC.
- (Previously Presented) A method of claim 6 wherein the recombinant pox virus 8. comprises MVA.
- (Original) A method of claim 1 where the vaccine is administered a second time. 9.
- (Previously Presented) A method of claim 1 wherein the HIV specific peptides are 10. structural viral peptides.
- 11. (Canceled).
- (Original) A method of claim 1 wherein the vaccine further comprises an adjuvant. 12.
- (Original) A method of claim 1 further comprising administering interleukin 2 or CD40 13. ligand in an amount sufficient to potentiate the CD8⁺ response.
- (Previously Presented) A method of claim 1 where the human has been infected with HIV 14. and has demonstrated repeated and sustained proliferative T-cell responses to Gp120 envelope protein.
- (Previously Presented) A method of claim 14 where the human has demonstrated 15. repeated and sustained proliferative T-cell responses to p24 Gag antigen.
- (Previously Presented) A method of claim 1 where the human is infected with HIV and is 16. further tested by a skin test for a hypersensitive response to p24 Gag antigen.

Title: Immunotherapy In HIV Infected Persons Using Vaccines After Multi-Drug Treatment

Dkt: 1662.018US1

- (Previously Presented) A method of claim 1 where the human is infected with HIV and is 17. further tested by a skin test for a hypersensitive response to Gp120 envelope antigen.
- (Currently Amended) A method of maintaining a reduced reducing viral load in a 18. mammal infected with an immunodeficiency retrovirus said method comprising:

administering to the mammal a recombinant virus, which enters the cells of the mammal and intracellularly produces immunodeficiency retroviral specific peptides for presentation on the cell's MHC class I molecules,

where said peptides are presented in an amount sufficient to stimulate a protective CD8⁺ HIV structural antigen response and thereby maintain a reduced viral load in the mammal, and where said mammal

- i. has an immunodeficiency retroviral load of less than 10,000 viral copies per ml of plasma and a CD4⁺ cell count of above 500 cells/ml prior to administration of the recombinant virus, and
- ii. has been treated with one or more anti-viral agents, which contributed to a lower viral copy and higher CD4⁺ cell count before treatment where said peptides comprise immunodeficiency retroviral Gag, Gp120, Nef or Pol peptides.
- (New) A method of stimulating a HIV1-specific CD8⁺ response in a human infected with 19. an HIV retrovirus said method comprising:

administering to the human, a recombinant virus, which enters the cells of the human and intracellularly produces HIV specific peptides for presentation on the cell's MHC class I molecules,

where said peptides are presented in an amount sufficient to stimulate a protective CD8+ HIV antigen response, and

where said human

i. has a viral load of less than 10,000 viral copies per ml of plasma and a CD4⁺ cell count of above 500 cells/ml, and

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/048,072 Filing Date: January 25, 2002

Title: Immunotherapy In HIV Infected Persons Using Vaccines After Multi-Drug Treatment

- ii. has been treated with one or more anti-viral agents, which contributed to a lower viral copy and higher CD4⁺ cell count than before treatment.
- 20. (New) A method of stimulating a HIV1-specific CD8⁺ response in a human infected with an HIV retrovirus said method comprising:

administering to the human, a recombinant virus, which enters the cells of the human and intracellularly produces HIV specific peptides for presentation on the cell's MHC class I molecules,

where said peptides are presented in an amount sufficient to stimulate a protective CD8⁺ HIV structural antigen response, and

where said human

- i. has a viral load of less than 10,000 viral copies per ml of plasma and a CD4^{$^+$} cell count of above 500 cells/ml, and
- ii. has been treated with one or more anti-viral agents, which contributed to a lower viral copy and higher CD4⁺ cell count than before treatment

where said HIV specific peptides comprise Gag, Pol, Env peptides or a combination thereof.